

Poster Sessions – Abstract P293

Treatment discontinuation in HIV-1-infected individuals starting their first-line HAART after 2008: data from the ICONA Foundation Study Cohort

Di Biagio, Antonio¹; Cozzi-Lepri, Alessandro²; Prinapori, Roberta³; Angarano, Gioacchino⁴; Gori, Andrea⁵; Quirino, Tiziana⁶; De Luca, Andrea⁷; Costantini, Andrea⁸; Mussini, Cristina⁹; Rizzardini, Giuliano¹⁰; Antinori, Andrea¹¹ and D'Arminio Monforte, Antonella on behalf of the ICONA, Foundation Study^{12,13}

¹Department of Internal Medicine, San Martino Hospital, Genoa, Italy. ²Division of Population Health, Department of Infection and Population Health, Royal Free Campus, UCL Medical School, London, UK. ³Department of Internal Medicine, IRCCS AOU San Martino Hospital, Genoa, Italy. ⁴Infectious Diseases, University of Bari, Bari, Italy. ⁵Infectious Diseases, Hospital Monza, Monza, Italy. ⁶Infectious Diseases, Hospital Busto Arsizio, Busto Arsizio, Italy. ⁷Infectious Diseases, University of Siena, Siena, Italy. ⁸Infectious Diseases, University of Ancona, Ancona, Italy. ⁹Infectious Diseases, University of Modena, Modena, Italy. ¹⁰Infectious Diseases, Sacco Hospital, Milano, Italy. ¹¹Infectious Diseases, INMI Lazzaro Spallanzani, Roma, Italy. ¹²Infectious Diseases, University of Milan, San Paolo Hospital, Milano, Italy. ¹³Health Sciences, University of Milan, San Paolo Hospital, Milano, Italy.

Introduction: The aim of this study was to analyze the likelihood and the predictors of discontinuation of first-line regimen in the late HAART era.

Methodology: An observational multi-center analysis of HIV-positive patients enrolled in ICONA. Patients eligible were those starting a first-line HAART after 1 January 2008. Discontinuation was defined as stop and/or switch of at least one drug of the regimen. All causes of discontinuation, as reported by the treating physician, were evaluated and cumulative risk of stopping was investigated according to age, gender, co-morbidity, years since starting HAART, immuno-virological status, third drug and backbone of the first regimen. Kaplan Meier (KM) analysis and Cox proportional hazards model were used for the outcome discontinuation of ≥ 1 drug regardless of the reason. For the KM estimates a competing risk approach was used to estimate the contribution of each of the reasons over time to the cumulative risk of stopping over time.

Results: Data of 1759 patients who started first HAART and had at least one month of clinical follow-up were analyzed. The overall discontinuation risk was 33% over a median follow-up of 12 months. The likelihood of discontinuation by KM was 27% by one year (95% CI 25–29) and 41% by two years (95% CI 38–44). Main reason for stopping at least one drug in regimen was simplification (10%), followed by intolerance (7%), toxicity (5%), failure (2%) and other causes (8%). Estimates of the cumulative risk of discontinuation of ≥ 1 drug over time and according to reason are shown in Figure 1. In a multivariable Cox model independent predictors of discontinuation regardless of the reason were: longer time from HIV diagnosis to date of starting

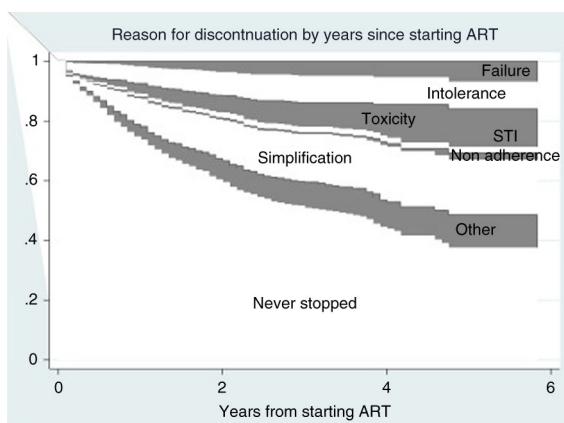


Figure 1. Reason of discontinuation.

Published 2 November 2014

Copyright: © 2014 Di Biagio A et al; licensee International AIDS Society. This is an Open Access article distributed under the terms of the Creative Commons Attribution 3.0 Unported (CC BY 3.0) License (<http://creativecommons.org/licenses/by/3.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

HAART (hazard ratio [HR] 0.96; 95% CI 0.93–1.00; $p = 0.039$), regimens containing ZDV/3TC (HR 2.86; 95% CI 1.42–5.76; $p = 0.003$ vs TDF/FTC) and an NNRTI-based regimen (HR 2.47; 95% CI 0.91–6.72; $p = 0.07$ vs regimens not NNRTI-based).

Conclusions: In a previously reported analysis of the ICONA data [1], the overall risk of discontinuation of first-line HAART was 36% with 21% due to intolerance/toxicity. In this updated analysis, the main reason for stopping is simplification (accounting for 32% of stops), reflecting the recent changes in recommendations aimed to minimize drug toxicity, enhancing adherence and quality of life.

Reference

1. d'Arminio Monforte A, Lepri AC, Rezza G, Pezzotti P, Antinori A, Phillips AN, et al. Insights into the reasons for discontinuation of the first highly active antiretroviral therapy (HAART) regimen in a cohort of antiretroviral naive patients. *AIDS*. 2000;14:499–507.